

IN THE CLAIMS:

1. (currently amended) In a cellular wireless communication system including a plurality of cellular wireless communication system network components intercoupled by a wired network, a method for distributing a file from a network component acting as a sender to a plurality of network components acting as receivers, the method comprising:

5 the sender establishing a multicast session with the plurality of receivers that service cellular wireless communications within the cellular wireless communication system;

the sender subdividing the file into a plurality of data packets, wherein the file comprises a software update that, when implemented, alters the manner in which the plurality of receivers service wireless terminals operating within their respective service areas;

10 the sender multicasting the plurality of data packets to the plurality of receivers;

[at least some of the plurality of receivers failing to correctly receive all of the plurality of data packets;

the at least some of the plurality of receivers failing to correctly receive all of the plurality of data packets] receiving error reporting [to] at the sender from at least some of the plurality of receivers that failed to correctly receive all of the plurality of data packets identifying [of] the plurality of data packets not correctly received; and

the sender transmitting a plurality of previously incorrectly received data packets of the plurality of data packets to the at least some of the plurality of receivers.

20 2. (original) The method of claim 1, wherein the sender is a base station manager.

3. (original) The method of claim 1, wherein the receivers are base station controllers.

4. (original) The method of claim 1, wherein the receivers are base stations.

5. (original) The method of claim 4, wherein:

the base stations operate according to a code division multiple access wireless operating  
5 standard; and

the base stations load the file onto a plurality of processing cards contained within the base  
stations.

6. (currently amended) The method of claim 4, further comprising the sender and the  
10 plurality of receivers using Forward Error Correction (FEC) to overcome transmission errors.

~~wherein, the plurality of receivers comprise a group of network components requiring a  
software update; and~~

~~the file comprises the software update.~~

15 7. (original) The method of claim 1, wherein error reporting to the sender comprises:  
the sender transmitting an error status request to the plurality of receivers; and  
at least one of the plurality of receivers responding to the sender with an error message.

8. (original) The method of claim 1, wherein error reporting to the sender comprises:  
20 the sender sends an error status request to a first plurality of receivers during a first time  
period;

the sender sends an error status request to a second plurality of receivers during a second  
time period; and

wherein the first time period is different from the second time period.

9. (currently amended) The method of claim 1, wherein transmitting a plurality of previously incorrectly unreceived data packets of the plurality of data packets to the at least some of the plurality of receivers comprises:

5 the sender determining a subset of receivers that failed to correctly receive all of the plurality of data packets;

the sender of the file determining a corresponding set of data packets that were not previously [in]correctly received by the subset of receivers; and

the sender of the file multicasting the corresponding set of data packets to the subset of  
10 receivers.

10. (currently amended) A system for distributing a file within a wireless communication network, the system comprising:

a server sender network component of the wireless communication network, the server sender network component comprising:

5 a processor;

a memory coupled to the processor; and

a network interface coupled to the processor;

a plurality of receiver network components of the wireless communication network that service cellular wireless communications within the cellular wireless communication system, each

10 of the receiver network components comprising:

a processor;

a memory coupled to the processor; and

a network interface coupled to the processor; and

a plurality of software instructions executable by the sender network component and the

15 plurality of receiver network components, the plurality of software instructions comprising:

a first set of sender software instructions that, when executed by the processor of the sender network component, causes the sender network component to establish a multicast session with the plurality of receiver network components;

20 a first set of receiver software instructions that, when executed by a receiver network component, causes the receiver network component to interact with the sender network component to join the multicast session;

a second set of sender software instructions that, when executed by the processor of the sender network component, causes the sender network component to subdivide the file into a plurality of data packets, wherein the file comprises a software update that, when implemented,

alters the manner in which the plurality of receiver network components service wireless terminals operating within their respective service areas;

5 a third set of sender software instructions that, when executed by the processor of the sender network component causes the sender network component to multicast the plurality of data packets to the plurality of receivers;

a second set of receiver instructions that, when executed by the processor of a receiver network component that fails to correctly receive all of the plurality of data packets, causes the receiver network component to error report to the sender network component; and

10 11 a fourth set of sender software instructions that, when executed by the processor of the sender network component, causes the sender network component to transmit a plurality of incorrectly received data packets of the plurality of data packets to the receiver network component that fails to correctly receive all of the plurality of data packets.

11. (currently amended) The system of claim 10, wherein the sender network component is a base station manager.

12. (currently amended) The system of claim 10, wherein the receiver network components are base station controllers.

20 13. (currently amended) The system of claim 10, wherein the receiver network components are base stations.

14. (original) The system of claim 13, wherein:

the base stations operate according to a code division multiple access wireless operating

standard; and

the base stations load the file onto a plurality of processing cards contained within the base stations.

5 15. (currently amended) The system of claim 10, further comprising a fifth set of sender software instructions that, when executed by the processor of the sender network component, causes the sender network component to use Forward Error Correction (FEC) to overcome transmission errors

wherein:

10 ~~the plurality of receivers comprise a group of network components requiring a software update; and~~

~~the file comprises the software update.~~

16. (currently amended) The system of claim 10, further comprising:

15 a fifth set of sender software instructions that, when executed by the processor of the sender network component, causes the sender network component to transmit an error status request to the plurality of receiver network components; and

20 a sixth set of sender software instructions that, when executed by the processor of the sender network component, causes the sender network component to receive an error status response from at least some of the plurality of receiver network components.

17. (currently amended) The system of claim 11, wherein the fifth set of sender software instructions further causes:

the sender network component to transmit an error status request to a first plurality of

receiver network components during a first time period;

the sender network component to transmit an error status request to a second plurality of receiver network components during a second time period; and

wherein the first time period is different from the second time period.

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18. (currently amended) The system of claim 10, further comprising a fifth set of sender instructions that, when executed by the processor of the sender network component, causes the sender network component to:

determine a subset of receiver network components that failed to correctly receive all of the 10 plurality of data packets;

determine a corresponding set of data packets that were not correctly received by the subset of receiver network components; and

multicast the corresponding set of data packets to the subset of receiver network components.

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19. (currently amended) A system for distributing a file within a wireless communication network, the system comprising:

a server protocol suite operating on a sender network component of the wireless communication network;

5 a plurality of receiver protocol suites operating on a plurality of receiver network components of the wireless communication network, wherein each of the plurality of receiver network components is communicatively coupled to the sender component and services cellular wireless communications within a serviced portion of a cellular wireless communication system;

10 wherein the server protocol suite causes the sender network component to establish a multicast session with the plurality of receiver network components;

wherein the receiver protocol suite causes the plurality of receiver network components to interact with the sender network component to join the multicast session;

15 wherein the server protocol suite causes the sender network component to subdivide the file into a plurality of data packets, wherein the file comprises a software update that, when implemented, alters the manner in which the plurality of receiver network components service wireless terminals operating within their respective service areas;

wherein the server protocol suite causes the sender network component to multicast the plurality of data packets to the plurality of receiver network components;

20 wherein the receiver protocol suite causes the plurality of receiver network components to error report to the sender network component; and

the server protocol suite causes the sender network component to transmit a plurality of incorrectly received data packets of the plurality of data packets to a receiver network component that fails to correctly receive all of the plurality of data packets.

20. (currently amended) The system of claim 19, wherein the sender network component is a base station manager.

21. (currently amended) The system of claim 19, wherein the receiver network components are base station controllers.

22. (currently amended) The system of claim 19, wherein the receiver network components are base stations.

10 23. (original) The system of claim 22, wherein:

the base stations operate according to a code division multiple access wireless operating standard; and

the base stations load the file onto a plurality of processing cards contained within the base stations.

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24. (currently amended) The system of claim 19, wherein the sender network component and the plurality of receiver network components use Forward Error Correction (FEC) to overcome transmission errors.

wherein:

20 ~~the plurality of receivers comprise a group of network components requiring a software update; and~~

~~the file comprises the software update.~~

25. (currently amended) The system of claim 19:

wherein the server protocol suite causes the sender network component to transmit an error status request to the plurality of receiver network components; and

wherein the receive protocol suite causes each of the plurality of receiver network components to respond to the sender network components with an error status response.

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26. (currently amended) The system of claim 19, wherein the server protocol suite causes the sender network component to:

transmit an error status request to a first plurality of receiver network components during a first time period;

10 transmit an error status request to a second plurality of receiver network components during a second time period; and

wherein the first time period is different from the second time period.

27. (currently amended) The system of claim 19, wherein the server protocol suite 15 causes the sender network component to:

determine a subset of receiver network components that failed to correctly receive all of the plurality of data packets;

determine a corresponding set of data packets were not correctly received by the subset of receiver network components; and

20 multicast the corresponding set of data packets to the receiver network components comprising the subset of receiver network components that failed to correctly receive all of the plurality of data packets.